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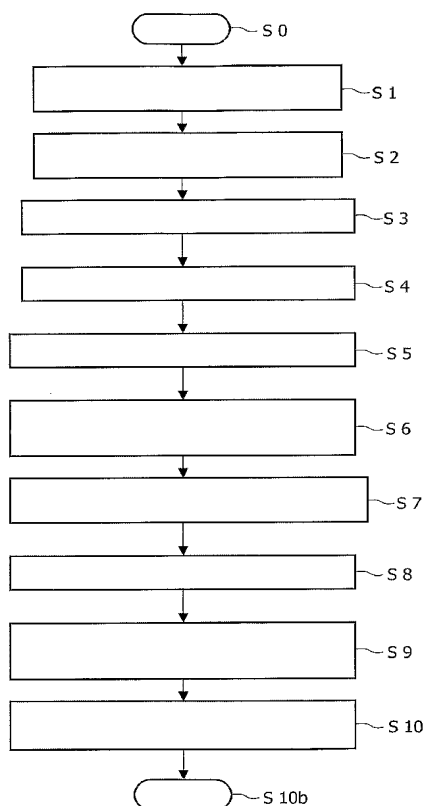
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(54) Title: MOTION COMPENSATION



(57) Abstract: Using only projection data in one temporal gating window around a certain target phase point may lead to motion artifacts such as blurred images. By using projection data corresponding to three temporal gating windows, which are slightly shifted with respect to each other but at least partially overlap, motion within the gating window may be estimated and, according to an exemplary embodiment of the present invention, this estimation may be used for improving the image quality. Advantageously, only the projection data inside the at least partially overlapping gating windows are used for reconstruction and motion compensation.

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